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Product Information

PP2Cα, active, GST-tagged, human recombinant, expressed in *Sf*9 cells

Catalog Number **SRP5335**
Storage Temperature –70 °C

Synonyms: PP2C alpha, PPM1A, PP2CA, MGC9201, FLJ42306

Product Description

PP2Cα is a member of the family of Ser/Thr protein phosphatases and is composed of a catalytic subunit and a constant regulatory subunit. PP2Cα is known to be a negative regulator of cell stress response pathways. PP2Cα has been reported to negatively regulate the TGF β signaling pathway and cell cycle. PP2Cα has been shown to dephosphorylate cyclin-dependent kinases (CDKs) and it may be involved in cell cycle control.[1] Overexpression of PP2Cα is reported to cause cell-growth arrest or cell death. PP2Cα is highly expressed in heart and skeletal muscle.[2]

Recombinant full-length human PP2Cα was expressed by baculovirus in *Sf*9 insect cells using an N-terminal GST-tag. The gene accession number is NM_021003. It is supplied in 50 mM Tris-HCl, pH 7.5, 150 mM NaCl, 10 mM glutathione, 0.1 mM EDTA, 0.25 mM DTT, 0.1 mM PMSF, and 25% glycerol.

Molecular mass: ~105 kDa

Precautions and Disclaimer

This product is for R&D use only, not for drug, household, or other uses. Please consult the Material Safety Data Sheet for information regarding hazards and safe handling practices.

Storage/Stability

The product ships on dry ice and storage at –70 °C is recommended. After opening, aliquot into smaller quantities and store at –70 °C. Avoid repeated handling and multiple freeze/thaw cycles.

Figure 1.
SDS-PAGE Gel of Typical Lot:
≥70% (SDS-PAGE, densitometry)

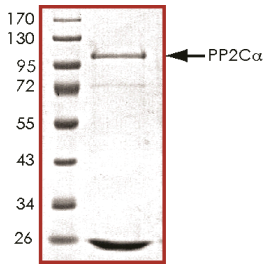
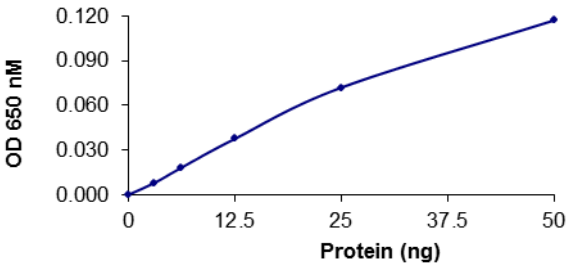


Figure 2.
Specific Activity of Typical Lot:
960–1,440 nmole/min/mg



Phosphatase activity was determined with a spectrophotometric assay procedure.

References

1. Parvari, R. et al., A recessive contiguous gene deletion of chromosome 2p16 associated with cystinuria and a mitochondrial disease. Am. J. Hum. Genet., **69**, 869-875 (2001).
2. Marley, A.E. et al., The cloning expression and tissue distribution of human PP2C-beta. FEBS Lett., **431**, 121-124 (1998).

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